



Waynesville Water- 2012 Annual Quality Report

Published 2013

We are pleased to provide you this year's **Annual Water Quality Report**. This report is designed to inform you about the quality and services we deliver to your home or business each day.

We work hard to protect our water resources and to continually improve the water treatment process. We have a current, unconditioned license to operate our water system. Our goal is to provide you with a safe and dependable water supply, by protecting and improving water quality.

Our water source is known as the Little Miami Valley Buried Aquifer. Water is supplied from three (3) wells, located in the **Waynesville Water** well field. The Aquifer that supplies the Waynesville well field has been determined to have a high susceptibility to contamination due to:

- Presence of significant potential contaminant sources in the protection area,
- No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities.

We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact at (513) 897-3200. If you want to learn more, please attend any of our regularly scheduled council meetings on the first and third Monday of each month at the Waynesville Government Center, 1400 Lytle Road, at 7:30PM.

At **Waynesville Water**, we work around the clock to provide top quality water to every tap. We ask that our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The sources of drinking water both tap water and bottled water includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally- occurring minerals and in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- (B) **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or results from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- (C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- (D) **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban Storm water runoff, and septic systems;
- (E) **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the **Safe Drinking Water Hotline 1-800-426-4791**.

Waynesville Water routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2012. (Unless noted otherwise)

Test Results

Contaminant	Violation	Level Detected	MCL	MCGL	Range of Detection	Date	Likely Source of Contamination
Regulated Inorganic Contaminants							
Fluoride	None	<0.50 ppm	4	4	<0.50 ppm	06/19/07	Erosion of natural deposits: water additive which promotes strong teeth: discharge from fertilizer and aluminum plant
Nitrogen, Nitrate+Nitrite	None	1.95 ppm	10	10	n/a	09/15/12	Runoff from fertilizer use: leaching from septic tanks, sewage: erosion of natural deposits

Lead and Copper

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined. If the 90th percentile exceeds the Action Level, specific corrective actions are required. None of our 90th percentiles exceeded the Action Levels. Ten samples were taken in 2012.

Lead	None	7.9 ppb 90 th Percentile	15 ppb	0	<5.0 to 10.8 ppb	06/26/12	Corrosion of household plumbing systems; Erosion of natural deposit.
Copper	None	341 ppb 90 th Percentile	1300 ppb	1300 ppb	<5.0 to 498 ppb	06/26/12	Corrosion of household plumbing systems; Erosions of natural deposit. Leaching from wood preservatives.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Waynesville is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the **Safe Drinking Water Hotline at 1-800-426-4791** or visit <http://www.epa.gov/safewater/lead>.

UN regulated Volatile Compounds

Contaminant	Violation	Level Detected	MCL=	MCGL=	Range of Detection	Date	Likely Source of Contamination
Barium	None	.075 ppm	2 ppm	2ppm	n/a	9/21/10	Natural Occurring element
Total Trihalomethanes TTHMs (ppb)	None	15.5 ppb	0	80 ppb	n/a	8/24/10	Disinfectant byproducts

Residual Disinfectant							
Contaminant	Violation	Level Detected	MRDL=	MRDL=	Detection Range	Date	Likely Source of Contamination
Total Chlorine	None	0.92 ppm	4ppm	4ppm	1.03-0.83 ppm	2012	Element used for disinfection

MCL's are set to the very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one - in - a - million chance of having the described health effect.

Additional Water Source- This well field is located in northwest Warren County. It is bordered by Trenton-Franklin Road on the north, Twin Creek on the west, the Great Miami River on the south, and the Conrail tracks on the east. This is an area of the confluence of the Twin Creek and Great Miami Buried Valley Aquifers. The water quality is exceptional and does not require treatment other than the addition of fluoride and chlorine. The Aquifer that supplies the Franklin-Clearcreek wellfield has been determined to have a high susceptibility to contamination due to:

- ❖ Presence of significant potential contaminant sources in the protection area.
- ❖ No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities

License - The Franklin-Clearcreek Water System currently has an unconditioned license to operate.

This report is based upon tests conducted by the Warren County Water Laboratory and its' contract laboratory.

Compliance Monitoring and Disinfection Requirements 2012

Substance	Highest Level Detected	Range of Detection	Violation	MCL	Ideal Goals (MCLG)	Sources of Substances
Fluoride	.99 ppm	0.8 to 1.3ppm	No	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Chlorine	1.1 mg/l	0.2 to 2.0 mg/l	No	4.0 ppm	4.0 ppm	Element used for disinfection
Total Coliform Monitoring	None	NA	No	None	None	Safely removed using chlorine. 360 samples taken with 0 positive coliforms

The table below lists all the drinking water contaminants that were tested for between January 1 and December 31, 2012. The presence of the contaminants in the water does not necessarily indicate that the water poses a health risk.

Franklin-Clearcreek Water System Detected Contaminants 2012

Substance	Highest Level Detected	Range of Detection	Violation	MCL	Ideal Goals (MCLG)	Sources of Substances
Nitrate	2.11 ppm	2.33 ppm	No	10ppm	10ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Trihalo- methanes	9.90 ppb	9.90 ppb	No	80 ppb	0 ppb	By-products of drinking water chlorination.
HAA5 Haloacetic acids	1.151 ppb	1.151 ppb	No	60 ppb	0 ppb	By-products of drinking water Chlorination.

Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90th percentile of each ranking is determined. If the 90th percentile exceeds the Action Level, specific corrective actions are required. None of our 90th percentiles exceeded the Action Levels. **Thirty samples were taken in 2011.**

Substance	Detected	Range	MCL	MCLG	Sources	Number of Samples Greater Than Action Level
Copper 2011	204 ppb 90 th percentile	28.4to 599 ppb	AL = 1300 ppb	1300 ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	0
Lead 2011	2.26 ppb 90 th percentile	<2.0 to 2.62 ppb	AL = 15 ppb	0 ppb	Corrosion of household plumbing; natural deposits.	0

Definitions for all tables:

MCL = Maximum Contaminant level – The highest level of a contaminant that is allowed in drinking water.

MCLG = Maximum Contaminant level goal – The level of contaminant in drinking water below which there is no known or expected risk to health.

AL = Action Level – The concentration of a contaminant which triggers a treatment or other requirements which a water system must follow .

MRDL= Maximum Residual Disinfectant Level **ppm= Parts per million** **ug/l= micrograms per liter** **ppb= Parts per Billion**

< = less than **ptl/l: Parts per trillion per liter** **fl/l: fibers per liter** **n/r: not regulated**

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the

Environmental Protection Agency's Drinking Water Hotline at 1-800-426-4791.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

Visit our website: www.waynesville-ohio.org